

WHAT IS CLAIMED IS:

1. A multiport connector, which comprises:
 - a housing having at least two aligned compartments, each compartment being structured and arranged to receive respective plugs;
 - 5 a multilayer printed wiring board separating the two compartments, the printed wiring board having circuit patterns on opposite sides of opposed non-conductive layers and a metal shielding layer intermediate the non-conductive layers;
 - a first plurality of conductive contact fingers in one of the compartments, the first plurality of fingers having first portions for making electrical contact with one
 - 10 of the plugs and second portions for making contact with the circuit pattern on one of the non-conductive layers of the multilayer printed wiring board; and
 - a second plurality of conductive contact fingers in the other of the compartments, the second plurality of fingers having first portions for making electrical contact with the other one of the plugs and second portions for making contact with the
 - 15 circuit pattern on the other one of the non-conductive layers of the multilayer printed wiring board.
2. A multiport connector in accordance with claim 1, wherein one of the compartments has a toroid assembly housing for housing two sets of toroids, one set for one compartment and the other set for the other compartment.
- 20 3. A multiport connector in accordance with claim 2, wherein the toroid assembly housing has a metal separator for separating one set of toroids from the other set of toroids.

4. A multiport connector in accordance with claim 2, wherein the toroid base assembly has a first set of contacts for connecting the two sets of toroids to the circuit patterns on the printed wiring board and a second set of contacts for connecting the two sets of toroids to an external circuit.

5 5. A multiport connector in accordance with claim 1, wherein the respective first portions of the first plurality of contact fingers and the second plurality of contact fingers have spacings therebetween which are equal to the spacings between corresponding contacts in the plug.

10 6. A multiport connector in accordance with claim 5, wherein the respective second portions of the first and second plurality of conductive contact fingers are spaced apart by distances greater than the spacings between the respective first portions.

15 7. A multiport connector in accordance with claim 1, wherein the first plurality of conductive contact fingers and the second plurality of conductive contact fingers are resilient and make contact with the circuit patterns by spring action forcing the second portions into electrical contact with the respective circuit patterns.

8. A multiport connector in accordance with any one of claims 1-7, wherein the compartments are upper and lower vertically aligned compartments.

20 9. A multiport connector in accordance with claim 8, wherein the housing has a front face and a rear face and metallic shields are disposed on the front and rear faces.

10. A multiport connector, which comprises:

a housing having a plurality of sets of upper and lower vertically aligned compartments, each compartment being structured and arranged to receive respective plugs;

5 a multilayer printed wiring board separating the two compartments of each set, the printed wiring board having circuit patterns on opposite sides of opposed non-conductive layers and a metal shielding layer intermediate the non-conductive layers;

10 a first plurality of conductive contact fingers in one of the compartment of each set, the first plurality of fingers having first portions for making electrical contact with one of the plugs and second portions for making electrical contact with the circuit pattern on one of the non-conductive layers of the multilayer board separating the upper and lower compartments of said set; and

15 a second plurality of conductive contact fingers in the other of the compartments, the second plurality of fingers having first portions for making electrical contact with the other one of the plugs and second portions for making contact with the circuit pattern on the other one of the non-conductive layers of the multilayer printed wiring board.

20 11. A multiport connector in accordance with claim 10, wherein one of the compartments of each set of upper and lower compartments has a toroid assembly housing for housing two sets of toroids, one set of toroids for one compartment and the other set of toroids for the other compartment.

25 12. A multiport connector in accordance with claim 11, wherein the toroid assembly housing has a metal separator for separating one set of toroids from the other set of toroids.

13. A multiport connector in accordance with claim 11, wherein the toroid base assembly has a first set of contacts for connecting the two sets of toroids to the circuit patterns on the printed wiring board and a second set of contacts for connecting the two sets of toroids to an external circuit.

5 14. A multiport connector in accordance with claim 10, wherein the respective first portions of the first plurality of contact fingers and the second plurality of contact fingers have spacings there between which are equal to the spacings between corresponding contacts in the plug.

10 15. A multiport connector in accordance with claim 14, wherein the respective second portions of the first and second plurality of conductive contact fingers are spaced apart by distances greater than the spacings between the respective first portions.

15 16. A multiport connector in accordance with claim 10, wherein the first plurality of conductive contact fingers and the second plurality of conductive contact fingers are resilient and make contact with the circuit patterns by spring action forcing the second portions into electrical contact with the respective circuit patterns.

17. A multiport connector in accordance with any one of claims 10-16, wherein the compartments are upper and lower vertically aligned compartments.

20 18. A connector which comprises:
a housing having a compartment structured and arranged to receive a plug
and a printed wiring board having a circuit pattern on at least one side; and

a plurality of conductive contact fingers in the compartment, the contact fingers having first portions for making contact with the plug and second portions structured and arranged for making electrical contact with the circuit pattern, the second portions of the conductive fingers being structured and arranged between the conductive pattern of the printed wiring board and a wall of the housing such that second portions of the conductive fingers are forced into electrical contact with the circuit pattern by spring pressure.

19. A multiport connector in accordance with claim 17, wherein the housing has a front face and a rear face and metallic shields are disposed on the front and rear faces.